RECLAMATION
Managing Water in the West

BUREAU OF RECLAMATION
MID-PACIFIC REGION

FINDING OF NO NEW SIGNIFICANT IMPACT

Acquisition of Up to 2,000 Acre-Feet of Water from Merced Irrigation District for the East Bear Creek Unit of the San Luis National Wildlife Refuge (2011)

FONNSI 11-17-MP

Recommended by: Shelly Hatleberg Date: 11/21/11
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ACTING FOR
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U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

RECLAMATION
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FINDING OF NO NEW SIGNIFICANT IMPACT
Acquisition of Up to 2,000 Acre-Feet of Water from Merced Irrigation District for the East Bear Creek Unit of the San Luis National Wildlife Refuge (2011)

FONNSI 11-17-MP

BACKGROUND

The Bureau of Reclamation (Reclamation) proposes to enter into a water service contract with the Merced Irrigation District (District) to provide a minimum of 500 acre-feet (AF) and up to a maximum of 2,000 AF of water in 2011 to the East Bear Creek Unit (Unit) of the San Luis National Wildlife Refuge. The proposed acquisition is being undertaken pursuant to, and would be in full compliance with, Sections 3406(b)(3) and 3406(d)(2) of Title XXXIV of the Act of October 1992 (106 Stat. 4706) Central Valley Project Improvement Act (CVPIA), which authorizes new water supply contracts for fish and wildlife purposes. The Proposed Action does not involve any construction activities and would not cause any land use changes.

Reclamation prepared an Environmental Assessment (EA) for the *Temporary Acquisition of Up to 2,000 Acre-feet of Water from Merced Irrigation District for the East Bear Creek Unit of the San Luis National Wildlife Refuge (2010)*, dated *October 18, 2010.* Reclamation adopted a Finding of No Significant Impact (FONSI) for the acquisition on November 3, 2010. The EA/FONSI covered the acquisition of water for November and December 2010 (EA and FONSI attached). On August 30, 2011, Reclamation and the District entered into "*Agreement No. 11-WC-20-0155 for the Acquisition of Water between the United States and Merced Irrigation District*" (Agreement) providing for the acquisition of up to 2,000 AF of water by Reclamation from the District for the period between August 30, 2011 and February 29, 2012 (water would only be acquired in November and December 2011).

FINDINGS

Reclamation reviewed the EA prepared for the previous acquisition of water from the District in 2010 and finds that analysis fully considered the range of effects that could result from acquiring water from the District in November and December. Rather than reiterate that analysis in a new EA, it is incorporated by reference in its entirety. The EA was provided for public review in 2010, and no agency or public comment was received. The action was also reviewed for impacts to threatened and endangered species, and none were found. Additionally, the action had no potential to affect historic properties pursuant to 36 CFR Part 800.3(a)(1), and no additional consideration under Section 106 of the National Historic Preservation Act was required. Therefore, Reclamation determined that the proposed acquisition of water would not result in any new significant impacts and is not a major federal action that would significantly affect the quality of the human environment requiring preparation of an Environmental Impact Statement.

RECLAMATION

Managing Water in the West

BUREAU OF RECLAMATION
MID-PACIFIC REGION

FINDING OF NO SIGNIFICANT IMPACT

Temporary Acquisition of Up to 2,000 Acre-Feet of Water from Merced Irrigation District for the East Bear Creek Unit of the San Luis National Wildlife Refuge (2010)

FONSI 10-38-MP

Recommended by: Shelly Hatleberg Date: 11/1/10
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Date: Nov. 3, 2010
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Approved by: Date: Nov. 3, 2010
Richard Woodley
Regional Resources Manager
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RECLAMATION
Managing Water in the West

FINDING OF NO SIGNIFICANT IMPACT
Temporary Acquisition of Up to 2,000 Acre-Feet of Water from Merced Irrigation District for the East Bear Creek Unit of the San Luis National Wildlife Refuge (2010)
FONSI 10-38-MP

BACKGROUND

In accordance with Section 102(2)(c) of the National Environmental Policy Act of 1969 (NEPA), as amended, the Bureau of Reclamation has prepared an Environmental Assessment (EA) for the *Temporary Acquisition of Up to 2,000 Acre-feet of Water from Merced Irrigation District for the East Bear Creek Unit of the San Luis National Wildlife Refuge (2010)*, dated *October 18, 2010* and is incorporated by reference.

Under the Proposed Action, Reclamation proposes to enter into a temporary water service contract with the Merced Irrigation District (District) to provide a minimum of 500 acre-feet (AF) and up to a maximum of 2,000 AF of water in November and December 2010 to the East Bear Creek Unit (Unit) of the San Luis National Wildlife Refuge. The proposed acquisition is being undertaken pursuant to, and would be in full compliance with, Sections 3406(b)(3) and 3406(d)(2) of Title XXXIV of the Act of October 1992 (106 Stat. 4706) Central Valley Project Improvement Act (CVPIA), which authorizes new water supply contracts for fish and wildlife purposes. The Proposed Action does not involve any construction activities and would not cause any land use changes.

FINDINGS

In accordance with NEPA, the Mid-Pacific Regional Office of Reclamation has found that the proposed temporary acquisition of water is not a major federal action that would significantly affect the quality of the human environment. Consequently, an Environmental Impact Statement is not required. This determination is supported by the following factors:

1. **Water Resources:** The Proposed Action would provide a beneficial effect to wetland habitat areas located within the Unit by providing a water supply of suitable quality on a delivery schedule that meets their needs. Due to the short-term period of this acquisition and the amount of water proposed for acquisition, little to no indirect or direct surface water or groundwater effects would occur. The Proposed Action would not involve any construction activities and thus would not cause any land use changes. As a result, the Proposed Action would not impact surface or ground water resources.

2. **Biological Resources:** The Proposed Action would be beneficial to the area's biological resources particularly migratory waterfowl. No adverse impacts to biological resources are expected, including special-status species as water will be delivered via the existing pumping plant on East Bear Creek and existing conveyance systems. Reclamation has determined that the Proposed Action would not affect special status species or migratory bird species with the potential to occur in the project area of effect. Therefore, no further consultation is required under Section 7 of the Endangered Species Act.

3. **Indian Trust Assets:** The Proposed Action does not affect any Indian Trust Assets (ITA). The nearest ITA is approximately 20 miles from the project location; therefore there would be no adverse effects to ITAs as a result of the Proposed Action.

4. **Cultural Resources:** The Proposed Action would acquire water for Refuge wetland areas on a schedule that meets refuge water needs. Water would be conveyed through existing facilities and would be used for wildlife refuge or wetland habitat water management. No ground disturbing activities, including excavation or construction are required to acquire the water. Since the Proposed Action has no potential to affect historic properties, no cultural resources would be impacted as a result of the Proposed Action.

5. **Environmental Justice:** Due to the nature of the Proposed Action (i.e., land use and agriculture would remain unchanged), there would be no adverse effects to minority or disadvantaged populations.

6. **Climate Change:** Since the Proposed Action would have no construction element and would use existing facilities within the range of normal operations, it would have no effect on climate change.

7. **Cumulative Impacts:** The Proposed Action would not result in any additions to irrigated lands or otherwise induce land use changes. Rather, the intended effect is to maintain current land use and prevent deterioration of existing wildlife habitat; therefore, there are no anticipated cumulative effects resulting from the Proposed Action.

RECLAMATION

Managing Water in the West

Temporary Acquisition of Up to 2,000 Acre-Feet of Water from Merced Irrigation District for the East Bear Creek Unit of the San Luis National Wildlife Refuge (2010)

San Joaquin Valley, California

Final Environmental Assessment

November 2010

U.S. Department of the Interior
Bureau of Reclamation

November 2010

Mission Statements

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

Contents

List of Acronyms and Abbreviations

AF	Acre-feet
APE	Area of Potential Effect
CFR	Code of Federal Regulations
CVPIA	Central Valley Project Improvement Act
EA	Environmental Assessment (NEPA)
ESA	Federal Endangered Species Act
FWCA	Fish and Wildlife Coordination Act
ITA	Indian Trust Assets
MBTA	Migratory Bird Treaty Act
MID	Merced Irrigation District
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
NWR	San Luis National Wildlife Refuge
PEIS	Programmatic Environmental Impact Statement
Reclamation	Bureau of Reclamation
Service	U.S. Fish and Wildlife Service
SHPO	State Historic Preservation Officer
Unit	East Bear Creek Unit
WAP	Water Acquisition Program

1.0 Purpose and Need

1.1 Introduction

This Environmental Assessment (EA) examines the environmental effects of a temporary acquisition of at least 500 acre-feet (AF) and up to a maximum of 2,000 AF of water from the Merced Irrigation District (MID) for the East Bear Creek Unit of the San Luis National Wildlife Refuge Complex (Unit) as part of the Department of the Interior's (Interior) Water Acquisition Program (WAP). The proposed acquisition is being undertaken pursuant to, and would be in full compliance with, Sections 3406(b)(3) and 3406(d)(2) of Title XXXIV of the Act of October 1992 (106 Stat. 4706) Central Valley Project Improvement Act (CVPIA), which authorizes new water supply contracts for fish and wildlife purposes.

Section 3406(d)(1) of the CVPIA requires the Secretary of the Interior, immediately upon enactment, to provide firm delivery of Level 2 and Level 4 water supplies to the various wetland habitat areas identified in the Bureau of Reclamation's (Reclamation) *Report on Refuge Water Supply Investigations* (Reclamation, 1989) and the *San Joaquin Basin Action Plan/Kesterson Mitigation Plan* (Interior et al, 1989). These reports describe water needs and delivery requirements for each wetland habitat area to accomplish the stated refuge management objectives. In the Reclamation report (1989), the average annual historical supplies were termed "Level 2", and the supplies needed for optimum habitat management were termed "Level 4".

Reclamation is the Federal lead agency for preparation of this EA pursuant to the National Environmental Policy Act (NEPA). As part of the Federal action, Reclamation would need to review and approve the proposed water acquisition to ensure that it meets applicable Federal and State laws, including policies and procedures governing acquisition of surface water supplies. The overall general impacts of implementing the CVPIA, including providing Level 4 water supplies is addressed in a Final Programmatic Environmental Impact Statement (PEIS) (Interior, 1999).

1.2 Purpose and Need

The purpose of the Proposed Action is for Reclamation to provide a minimum of 500 AF and up to a maximum of 2,000 AF of MID water to help meet the refuge water needs for the Unit in late 2010 (November and December). The water would be acquired by Reclamation for the Refuge consistent with CVPIA water quantities for wildlife habitat development. Refuges are eager to identify additional supplies to annually maintain wetland habitats. The proposed water acquisition is an opportunity to augment limited Refuge supplies. The exact amount of water to be acquired will vary based upon the actual water needs of the Unit as determined by the Refuge Representative and the actual amount of water available from MID.

The purpose of the water acquisition is to enhance and maintain wetland habitats for the benefit of migratory waterfowl, and wetland-dependent wildlife in the San Joaquin Valley. The notable difference between obtaining water supplies for optimum management (Level 4) and average annual deliveries (Level 2) is that Level 4 water supplies allow for the management of habitat diversity. Habitat management includes timing and duration of fall and late winter flooding, summer water for food production, and permanent wetland habitat maintenance (Reclamation, 2000).

This EA: (1) describes the existing environmental resources in the project area; (2) evaluates the effects of the alternatives (including the Proposed Action) on the resources; and, (3) proposes measures to avoid, minimize, or mitigate any adverse effects. This EA is in compliance with NEPA and Council on Environmental Quality regulations (40 CFR 1500-1508). Reclamation has also prepared a Finding of No Significant Impact (FONSI) which explains why the Proposed Action will not have any significant effects on the human environment.

2.0 Alternatives

2.1 No Action Alternative

Under the No Action Alternative, water deliveries to the Unit would consist of existing supplies that help meet Level 2 requirements and any water acquired from other sources to help meet the Incremental Level 4 quantities. Absent this water purchase, water available for acquisition from MID in 2010 would have remained in storage in Lake Yosemite. As a result, the No Action Alternative is not likely to result in any appreciable change in the Refuge's water management operations or cause any measurable effects. Under the No Action Alternative, no changes would occur to the operations or water supply for the Refuge.

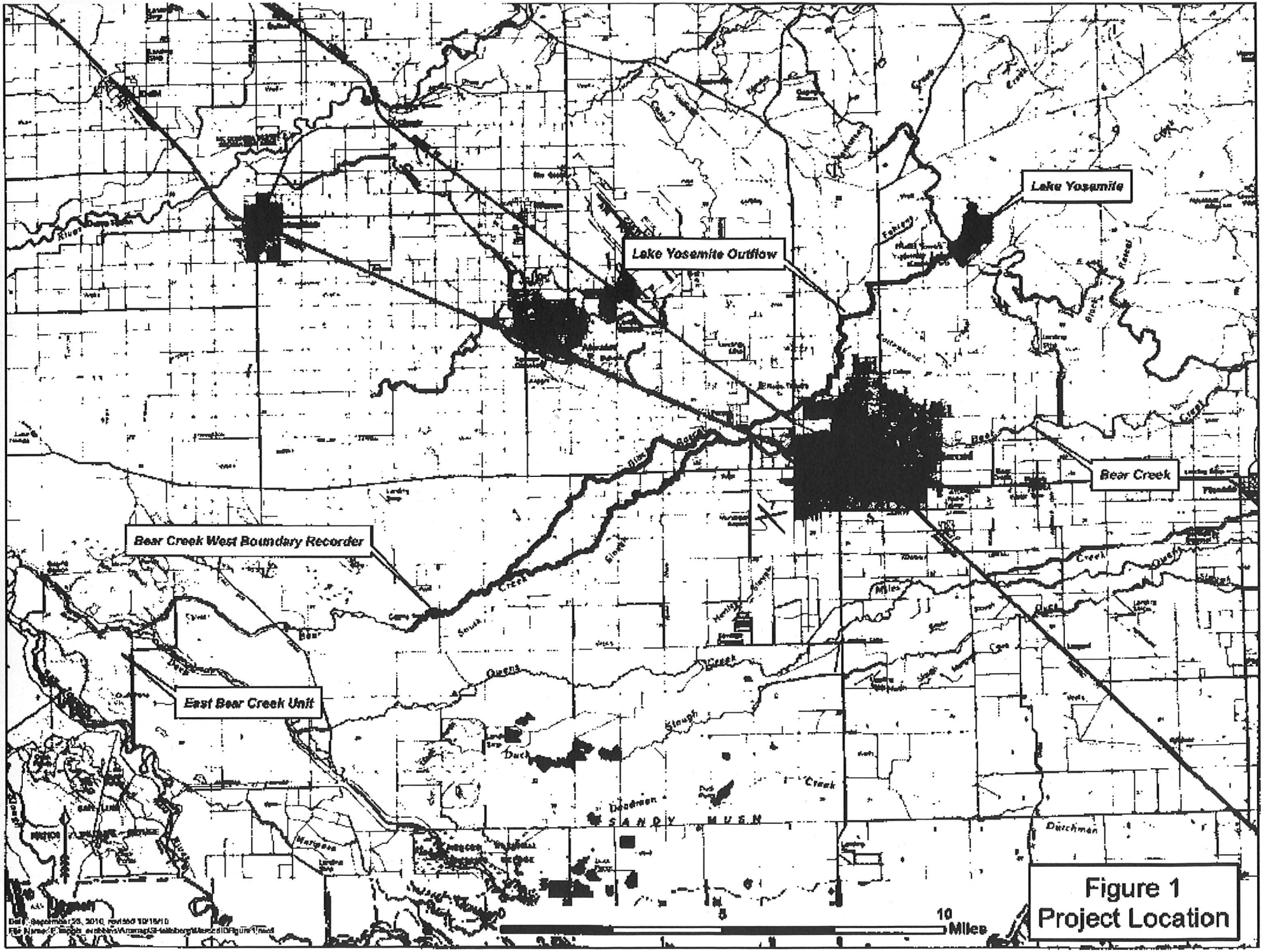
2.2 Proposed Action Alternative

The Proposed Action meets the identified purpose and need as previously described. The Proposed Action is for Reclamation to enter into an agreement with MID for a temporary water acquisition of at least 500 AF and up to a maximum of 2,000 AF to help meet water supply needs for the Unit in November and December 2010. This water would be made available for acquisition from Lake Yosemite via Bear Creek and the existing Bear Creek pumping plant (the water would be released at the Bear Creek west boundary recorder located at the intersection of the East Bear Creek and Burt Crane Road) (Figure 1). All elements of the Proposed Action would take place in November and December 2010.

Table 1 Water Schedule to East Bear Creek Unit

Month	Base Water (AF)[1]	Excess Water (AF)[1]	Total Base and Excess Water (AF)
March	0	0	0
April	0	0	0
May	0	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	500	500	1,000
December	0	1,000	1,000
January	0	0	0
February	0	0	0
Annual Total	**500**	**1,500**	**2,000**

[1]Amounts include estimated losses and water required to maintain surface elevation of 66 feet above sea level at East Bear Pumping Plant.


Lake Yosemite
Lake Yosemite Outflow
Bear Creek
Bear Creek West Boundary Recorder
East Bear Creek Unit
Figure 1
Project Location
10
Miles

3.0 Affected Environment & Environmental Consequences

3.1 Resources Considered

Evaluation of the Proposed Action indicates the following resources could be affected by the project:

- Water Resources (surface and ground water)
- Biological Resources
- Cultural Resources
- Indian Trust Assets
- Environmental Justice
- Climate Change

3.2 Resources Not Analyzed in Detail

Evaluation of the Proposed Action indicates that there would be little to no indirect, direct or cumulative effects on several resources. As a result, these resources are not discussed further in this EA, including:

- Land Use
- Air Quality
- Geology and Soils
- Hazards and Hazardous Materials
- Noise
- Mineral Resources
- Traffic and Transportation
- Recreation
- Agricultural Resources
- Public Services
- Utilities
- Socioeconomics

3.3 Water Resources

3.3.1 Affected Environment

There is a hydraulic continuity of groundwater along the San Joaquin Valley floor between the San Joaquin River and its tributary streams and the underlying aquifer. Groundwater is supplied by runoff from the foothills and mountains which percolates through the soil to the San Joaquin basin aquifer (Reclamation 2000).

Groundwater pumped from the aquifer is used for local irrigation and municipal uses within the MID service area. MID gets a limited portion of their water supplies from groundwater, averaging 10,000 AF per year, and they have an active program designed to reduce overdraft, including conjunctive use, water reclamation and water conservation (Reclamation 2000).

The Merced River flows westerly from Yosemite National Park to the San Joaquin River. MID has Merced River water rights based on federal and state permits, as well as pre-1914 water rights. MID's principal storage and regulating reservoir is Lake McClure, located on the Merced River. Surface water is delivered to MID customers via a system of 790 miles of canals, laterals, and pipelines (City of Merced 2001).

Lake Yosemite is a man-made reservoir owned by MID. The lake's water is distributed to local growers to support the region's agriculture industry. Acquired water from Lake Yosemite would be delivered via the outflow which travels downstream via Black Rascal Creek and/or Bear Creek to the Unit (Figure 1).

The majority of water used by the San Luis NWR Complex, prior to the enactment of the CVPIA as well as recent Incremental Level 4 acquisitions, has been either surplus CVP water or surplus State Water Project water. The East Bear Creek Unit is located east of the San Joaquin River, in Merced County. The Unit includes Bear Creek and contains natural grasslands, vernal pools, riparian floodplain habitat, irrigated pasture and small-grain production lands. The Unit is managed primarily for migratory waterfowl, shorebirds, marsh and water birds and their associated habitat types, as well as for listed species.

3.3.2 Environmental Consequences

No Action Alternative

Under the No Action Alternative, no changes would occur to the operations or water supply for MID. The No Action Alternative is not likely to result in any appreciable change in East Bear Creek Unit water management operations or cause any measurable effects. Absent this water purchase, water available for acquisition from MID would remain in storage in Lake Yosemite.

Proposed Action Alternative

The Proposed Action would deliver water to Unit wetland areas on a schedule that meets refuge water needs and would be of improved quality as compared to the No Action Alternative. Therefore, the Proposed Action provides a beneficial effect to wetland habitat areas located within the Unit by providing a water supply of suitable quality on a delivery schedule that meets their needs.

The Proposed Action would not impact San Joaquin River flows. There would be a negligible water quality benefit to the San Joaquin River basin due to improved fall water quality applied to the Unit. The Proposed Action would result in beneficial effects on Bear Creek flows during November and December when water is sent downstream to the Unit from Lake Yosemite. Due to the short-term period of this acquisition and the amount of water proposed for acquisition, little to no indirect or direct surface water or groundwater effects would occur.

Cumulative Effects

Implementation of the Proposed Action would not impact the amount of draft of groundwater in the vicinity of the Unit and would likely result in a temporary benefit to local water quality. The Proposed Action would supply water for uses such as wetlands, waterfowl and wildlife purposes. The Proposed Action would have no significantly cumulative impacts on surface or groundwater.

3.4 Biological Resources

3.4.1 Affected Environment

The habitats present at the Unit are natural valley grasslands and developed marsh. The Unit is managed primarily for migratory waterfowl, shorebirds, marsh and water birds, and their associated habitat types as well as for listed species. A species list, included in Table 2 below, was generated from the USFWS Sacramento Field Office's website on October 14, 2010 (USFWS 2010).

Table 2: Species Identified as Potentially Occurring in the Merced, Atwater, Arena and Stevinson USGS 7.5-minute Quadrangles

Common Name	Scientific Name	Federal/ State Status[1]	Habitat in Area
INVERTEBRATES			
Branchinecta conservatio	Conservancy fairy shrimp[3]	FE	No
Branchinecta longiantenna	Longhorn fairy shrimp[3]	FE	No
Branchinecta lynchi	Vernal pool fairy shrimp[3]	FT	No
Desmocerus californicus dimorphus	Valley elderberry longhorn beetle	FT	No
Lepidurus packardi	Vernal pool tadpole shrimp[3]	FE	No
FISH			
Hypomesus transpacificus	Delta smelt	FT/ST	No
Oncorhynchus mykiss	Central Valley steelhead[2], [3]	FT	No
Oncorhynchus tshawytscha	Central Valley spring-run Chinook salmon[2, 3]	FT	No
Oncorhynchus tshawytscha	Winter-run Chinook salmon, Sacramento River[2, 3]	FE	No
AMPHIBIANS			
Ambystoma californiense	California tiger salamander, central population[3]	FT	No
Rana aurora draytonii	California red-legged frog	FT	No
REPTILES			
Gambelia (=Crotaphytus) sila	Blunt-nosed leopard lizard	FE/SE	No
Thamnophis gigas	Giant garter snake	FT/ST	Yes
MAMMALS			
Dipodomys nitratoides exilis	Fresno kangaroo rat	FE	No
Vulpes macrotis mutica	San Joaquin kit fox	FE/ST	No
PLANTS			
Chamaesyce hooveri	Hoover's spurge[3]	FT	No
Castilleja campestris ssp. succulent	Succulent (=fleshy) owl's clover[3]	FT	No

Common Name	Scientific Name	Federal/ State Status[1]	Habitat in Area
PLANTS			
Neostapfia colusana	Colusa grass[3]	FT/SE	No
Orcuttia inaequalis	San Joaquin Valley Orcutt grass[3]	FT	No
Orcuttia pilosa	Hairy Orcutt grass	FE	No
Tuctoria greenei	Greene's tuctoria (=Orcutt grass)[3]		No

[1] FPE=Proposed Endangered, FPT=Proposed Threatened, FE=Endangered, FT=Threatened, FC=Candidate, ST=State Threatened

[2] Listed under the jurisdiction of National Oceanic and Atmospheric Administration, Fisheries

[3] Critical Habitat designated for this species

The Unit, as part of the San Luis NWR, is a major wintering ground and migratory stopover point for large concentrations of waterfowl, shorebirds and other waterbirds. Large flocks of northern shoveler, mallard, gadwall, wigeon, green-winged teal, cinnamon teal, northern pintail, ring-billed duck, canvasback, ruddy duck, and snow, Ross' and white-fronted geese utilize seasonal and permanent wetlands in the San Luis NWR, including the East Bear Unit. Waterfowl generally remain until mid-April before beginning their journey north to breeding areas. Some mallard, gadwall, and cinnamon teal stay through the spring and summer and breed on the refuge. (USFWS website 2010)

Shorebirds, including sandpipers and plovers, can be found in the tens of thousands from autumn through spring. Large flocks of dunlin, long-billed dowitchers, least sandpipers and western sandpipers can be found feeding in shallow seasonal wetlands, whereas flocks of long-billed curlews are found using both wetlands and grasslands. Over 25 species of shorebirds have been documented at the San Luis NWR. (USFWS website 2010)

The Unit supports a rich botanical community of native bunchgrasses, native and exotic annual grasses, forbs, and native shrubs. Trees, such as valley oak, cottonwood, and willow are found along riparian corridors. Coyotes, desert cottontail rabbits, ground squirrels, western meadowlarks, yellow-billed magpies, loggerhead shrikes, northern harriers, and white-tailed kites are found within these areas. (USFWS website 2010)

3.4.2 Environmental Consequences

No Action Alternative

Under the No Action Alternative, no changes would occur to the operations or water supply for MID. The No Action Alternative is not likely to result in any appreciable change in East Bear Creek Unit water management operations or cause any measurable effects. Absent this water purchase, water available for acquisition from MID would remain in storage in Lake Yosemite.

Proposed Action Alternative
The acquisition of water supplies under the Proposed Action would result in the Unit temporarily receiving more water than they would have received under the No Action Alternative. The additional water supplies would be delivered during the months of November and December 2010. The water would allow for improved management of the wetland habitat areas to benefit migratory and breeding waterfowl and other water birds within the Unit. The water would be used for:

- fall flooding of seasonal marshes to allow for increased wildlife use;
- maintenance of additional acreage of late summer water and maintenance of permanent ponds for breeding wildlife;
- an increase in the amount and quality of watergrass, an important waterfowl food item;
- an increase in the "flow through" of water levels to decrease the potential for disease outbreaks;
- maintenance of water depths to provide optimal foraging conditions for water birds; and
- control of undesirable vegetation.

These management changes would improve water quality and habitat value for migrating water birds, which could also improve diversity. Until long-term water supplies become available and are acquired by Reclamation, this water is considered temporary and the benefits short-term. Therefore, the Proposed Action would result in beneficial impacts on vegetation and wildlife resources.

Cumulative Effects
The Proposed Action is to temporarily provide at least 500 AF and up to a maximum of 2,000 AF water supply to the Unit to benefit wetland and wildlife management activities. The acquisition of water is short-term. There would be no loss of vegetation or habitat but rather short-term benefits to both within the project area. The Proposed Action would have no significantly cumulative impacts on wildlife and vegetation.

3.5 Cultural Resources

3.5.1 Affected Environment
A cultural resource is a broad term that includes prehistoric, historic, architectural, and traditional cultural properties. The National Historic Preservation Act (NHPA) of 1966 is the primary Federal legislation that outlines the Federal Government's responsibility to cultural resources. Section 106 of the NHPA requires the Federal Government to take into consideration the effects of an undertaking on cultural resources listed on or eligible for inclusion on the National Register of Historic Places (NRHP). Those resources that are on, or eligible for inclusion on, the NRHP are referred to as historic properties.

The Section 106 process is outlined in the Federal regulations at 36 Code of Federal Regulations (CFR) Part 800. These regulations describe the process that the Federal agency (Reclamation) takes to identify cultural resources and the level of effect that the proposed undertaking would have on historic properties. In summary, Reclamation must first determine if the action is the type of action that has the potential to affect historic properties. If the action is the type of action to affect historic properties, Reclamation must identify the area of potential effects (APE), determine if historic properties are present within that APE, determine the effect that the undertaking would have on historic properties, and consult with the State Historic Preservation Office (SHPO), to seek concurrence on Reclamation's findings. In addition, Reclamation is required through the Section 106 process to consult with Indian Tribes concerning the identification of sites of religious or cultural significance, and consult with individuals or groups who are entitled to be consulting parties or have requested to be consulting parties.

The Proposed Action does not involve the types of activities that have the potential to effect historic properties pursuant to the regulations at 36 CFR Part 800.3(a)(1). Land use would remain unchanged and no construction or other land use changes would be caused by the proposed provision of water to Refuges.

3.5.2 Environmental Consequences

No Action Alternative

Under the No Action Alternative, there would not be an undertaking as defined by Section 301 of the NHPA. The condition of cultural resources would be the same as under the existing conditions. No impacts to cultural resources are associated with this No Action Alternative.

Proposed Action Alternative

The Proposed Action would acquire water for Refuge wetland areas on a schedule that meets refuge water needs. Water would be conveyed through existing facilities and would be used for wildlife refuge or wetland habitat water management. No ground disturbing activities, including excavation or construction are required to convey the water. Since the Proposed Action has no potential to affect historic properties, no cultural resources would be impacted as a result of the Proposed Action.

Cumulative Effects

The Proposed Action has no potential to effect historic properties and, therefore, would not contribute to cumulative impacts to cultural resources.

3.6 Indian Trust Assets

3.6.1 Affected Environment

Indian Trust Assets (ITAs) are legal interests in property held in trust by the U.S. for federally-recognized Indian tribes or individual Indians. An Indian trust has three components: (1) the trustee, (2) the beneficiary, and (3) the trust asset. ITAs can include land, minerals, federally-reserved hunting and fishing rights, federally-reserved water rights, and in-stream flows associated with trust land. Beneficiaries of the Indian trust relationship are federally-recognized Indian tribes with trust land; the U.S. is the trustee. By definition, ITAs cannot be sold, leased, or otherwise encumbered without approval of the U.S. The characterization and application of the U.S. trust relationship have been defined by case law that interprets Congressional acts, executive orders, and historic treaty provisions.

Consistent with President William J. Clinton's 1994 memorandum, "Government-to-Government Relations with Native American Tribal Governments," Reclamation assesses the effect of its programs on tribal trust resources and federally-recognized tribal governments. Reclamation is tasked to actively engage federally-recognized tribal governments and consult with such tribes on government-to-government level (Federal Register, Vol. 59, No. 85, May 4, 1994, pages 22951 -22952) when its actions affect ITAs. The Interior's Departmental Manual Part 512.2 ascribes the responsibility for ensuring protection of ITAs to the heads of bureaus and offices (Interior 1995). It is the general policy of the Interior to perform its activities and programs in such a way as to protect ITAs and avoid adverse effects whenever possible. The proposed action would be implemented to ensure compliance with this policy. In addition, Reclamation would comply with procedures contained in Departmental Manual Part 512.2, guidelines, which protect ITAs. The Interior is required to "protect and preserve Indian trust assets from loss, damage, unlawful alienation, waste, and depletion" (Interior 2000). Reclamation is responsible for assessing whether the action of acquiring water for the purposes of 2010 refuge water supply would have the potential to affect ITAs. Reclamation will comply with procedures contained in Departmental Manual Part 512.2, guidelines, which protect ITAs.

3.6.2 Environmental Consequences

No Action Alternative

Under the No Action Alternative, there are no impacts to ITAs since there would be no change in operations and no ground disturbance. Conditions related to ITAs would remain the same as existing conditions.

Proposed Action Alternative

The Proposed Action does not affect any ITAs. The nearest ITA is the Santa Rosa Rancheria, approximately 20 miles from the Proposed Action area and it would not be affected by the Proposed Action.

Cumulative Effects

The Proposed Action would not result in adverse impacts to ITAs and, therefore, would not contribute to cumulative impacts to ITAs.

3.7 Environmental Justice

3.7.1 Affected Environment

Executive Order 12898 requires each Federal agency to achieve environmental justice as part of its mission, by identifying and addressing disproportionately high adverse human health or environmental effects, including social and economic effects, of its programs and activities on minority populations and low-income populations of the United States.

3.7.2 Environmental Consequences

No Action Alternative

Under the No Action Alternative, there are no impacts to minority or low-income populations since there would be no change in operations and no ground disturbance. Conditions related to environmental justice would remain the same as existing conditions.

Proposed Action Alternative

Due to the nature of the Proposed Action (i.e., land use and agriculture would remain unchanged), there would be no effects to minority or low-income populations.

Cumulative Effects

As the Proposed Action does not have the potential to cause adverse impacts to economically disadvantaged or minority populations, it would not result in cumulative effects to environmental justice.

3.8 Global Climate Change

3.8.1 Affected Environment

The United Nations Intergovernmental Panel on Climate Change predicts that changes in the earth's climate will continue through the 21st century and that the rate of change may increase significantly in the future because of human activity. Many researchers studying California's climate believe that changes in the earth's climate have already affected California and will continue to do so in the future. Climate change may seriously affect the State's water resources. Temperature increases could affect water demand and aquatic ecosystems. Changes in the timing and amount of precipitation and runoff could occur.

Climate change is identified in the 2005 update of the California Water Plan (Bulletin 160-05) as a key consideration in planning for the State's future water management. The 2005 Water Plan update qualitatively describes the effects that climate change may have on the State's water supply. It also describes efforts that should be taken to quantitatively evaluate climate change effects for the next Water Plan update.

3.8.2 Environmental Consequences

No Action Alternative

Under the No Action Alternative, there are no impacts to climate since there would be no change in operations and no ground disturbance. Conditions related to climate change would remain the same as existing conditions.

Proposed Action Alternative

Since the Proposed Action would have no construction element and would use existing facilities within the range of normal operations, it would have no effect on climate change.

Cumulative Effects

The Proposed Action would not result in adverse impacts to climate change and, therefore, would not contribute to cumulative impacts to climate change.

4.0 Consultation and Coordination

4.1 Fish and Wildlife Coordination Act (16 USC. 651 et seq.)

The Fish and Wildlife Coordination Act (FWCA) requires that Reclamation consult with fish and wildlife agencies (federal and state) on all water development projects that could affect biological resources. The Proposed Action would not affect biological resources therefore no further coordination is needed under the FWCA.

4.2 Endangered Species Act (16 USC. 1521 et seq.)

Section 7 of this Act requires Federal agencies to ensure that all federally associated activities within the United States do not jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of the critical habitat of these species. Action agencies must consult with the U.S. Fish and Wildlife Service, which maintains current lists of species that have been designated as threatened or endangered, to determine the potential impacts a project may have on protected species. Reclamation determined that the Proposed Action would not affect federally proposed or listed threatened and endangered species or their proposed or designated critical habitat. No further consultation is required under Section 7 of the Endangered Species Act.

4.3 Migratory Bird Treaty Act (16 USC § 703 ET SEQ.)

The Migratory Bird Treaty Act implements various treaties and conventions between the U.S. and Canada, Japan, Mexico and the former Soviet Union for the protection of migratory birds. Unless permitted by regulations, the Act provides that it is unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not. Subject to limitations in the Act, the Secretary of the Interior (Secretary) may adopt regulations determining the extent to which, if at all, hunting, taking, capturing, killing, possessing, selling, purchasing, shipping, transporting or exporting of any migratory bird, part, nest or egg will be allowed, having regard for temperature zones, distribution, abundance, economic value, breeding habits and migratory flight patterns. The Proposed Action would not affect migratory birds therefore no further coordination is needed under the MBTA.

4.4 National Historic Preservation Act (16 USC 470 et seq.)

The National Historic Preservation Act (NHPA) of 1966 is the primary Federal legislation which outlines the Federal Government's responsibility to cultural resources. Section 106 of the NHPA requires the Federal Government to take into consideration the effects of an undertaking listed on cultural resources on or eligible for inclusion in the National Register of Historic Places (National Register). Those resources that are on or eligible for inclusion on the National Register are referred to as historic properties.

5.0 Public Involvement

The Draft EA was circulated to interested parties for a 15-day public review period that began October 19, 2010 and ended November 2, 2010. The Draft EA was posted on Reclamation's Mid-Pacific (MP) Region NEPA website. No comments were received on the document.

6.0 List of Preparers and Reviewers

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7.0 References

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